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ABSTRACT

This action research project evaluated a program for improving middle school and high school students' engagement and ownership in the learning process. The problems of students exhibiting an inadequate level of engagement and ownership was documented through data showing quality of student work, anecdotal records kept by the teachers, and observations of student behavior. The targeted population consisted of middle school students in a middle class community and high school students in a lower middle class urban community in northern Illinois. Participating in the intervention were students in one sixth grade communication arts class, one seventh grade communication arts class, and one ninth grade health class. The 5-month intervention comprised 3 parts: (1) lessons requiring goal setting; (2) a series of cooperative learning activities; and (3) provision of greater student choice in learning activities and assessment. A pretest-posttest comparison was used to assess the impact of the intervention. The findings indicated that there was an improvement in student engagement as shown by students being more involved with the tasks, setting and achieving goals, and completing tasks in more depth. (Fourteen appendices include data collection instruments and sample materials. Contains 38 references.) (Author/KB)

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INCREASING STUDENT ENGAGEMENT THROUGH GOAL-SETTING, COOPERATIVE LEARNING & STUDENT CHOICE

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An Action Research Project Submitted to the Graduate Faculty of School of Education in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Teaching and Leadership

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DEDICATION

We are dedicating this report to our families for their understanding, patience, and support throughout this two year project.

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ABSTRACT

This report describes a program for improving student engagement and ownership in the learning process. The targeted population consisted of middle school students in a growing, middle class community, and high school students in a growing, lower-middle class, urban community, located in northern Illinois. The problem of students exhibiting an inadequate level of engagement and ownership was documented through data showing quality of student work, anecdotal records kept by the teacher, and observations of student behavior.

Analysis of probable cause data revealed that educational decisions resulted in a lack of student control over the learning environment and curriculum perceived as irrelevant by students. Student attitudes suggested a need for more socializing opportunities within the learning task and a more active role in the learning process. Reviews of family and social issues showed that lack of parental support, peer pressure, cultural diversity, and diversity in academic preparation were possible causes of this problem.

A review of solution strategies suggested by knowledgeable others, combined with an analysis of the problem setting, resulted in the selection of three major categories of intervention: a development of lessons that require goal setting; the development of a series of cooperating learning activities to improve engagement and ownership; and the provision of greater student choice in learning activities and assessment.

As a result of the intervention, there was an improvement in student engagement as shown by students being more involved with the tasks, setting and achieving goals, and completing tasks in more depth.

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CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

Students of the targeted middle school and High school classes exhibit inadequate engagement and ownership in the learning process. Evidence for the existence of the problem includes a pretest, teacher/student surveys, and case studies.

Immediate Problem Context

Site A School Setting

Site A has a population of 759 students. It is a middle school that houses the sixth, seventh, and eighth grades. The ethnicity of the student population is: 84% White Non-Hispanic, 8% Black Non-Hispanic, 5% Hispanic, 2% Asian/Pacific Islander, and 2% Native American. Ten percent of the students receive special education services. Economically 10% of the students are eligible for a free or reduced priced lunch. The operating expenditure per pupil is $4,563. The student attendance rate is 96.3%, and the mobility rate is 25.1%. This mobility rate is affected by the transfer of employees at the Empress and Harrah's riverboats. In addition, there are 980 homes currently being built within the district's boundaries, and families are continually moving into the finished homes throughout the year.

The school has 51 certified staff members. Of these, seven are special education teachers, one is a librarian, one is a speech pathologist, and one is an English as a second language (ESL) teacher. The speech pathologist and the ESL teacher are

shared among the schools in the district. In addition, there are two support staff members which include a special education aide and a library aide. Within the school district, the average teaching experience is 14.1 years. Approximately 66.6% of the district's teachers hold bachelor's degrees and 33.4% have their master's degree. The average teacher's salary in the district is $37,540. In addition, the target school has an administrative team consisting of a principal, a director of curriculum and staff development, a dean of students, and two guidance counselors.

The school's structure follows a middle school model. The school houses the sixth, seventh, and eighth grades and consists of two teams per grade level. A team consists of the following core teachers: a math teacher, a science teacher, a social studies teacher, and two communication arts teachers with a special education teacher assigned to each team. Students are enrolled in each core class for one period a day except for the communication arts class which meets two periods daily. In addition to these four core classes, physical education and an advisory class are a daily requirement. Students also choose one exploratory class. They choose from band, chorus, or an exploratory rotation which includes a quarter of study skills, art, drama, and cultural diversity/Spanish. Students who receive special education services may be placed in special education classes or be included in regular classes. A wide variety of extracurricular activities are offered in which they may participate. Interscholastic athletic opportunities include cross country, baseball, volleyball, wrestling, basketball,

cheerleading, pom pons, and track. Intramural athletic opportunities include flag football, basketball, and volleyball. Academic extracurricular activities include yearbook, scholastic bowl, student council, geography bee, jazz band, swing club, drama, science carnival, and science fair.

The school building is a single level, T shaped facility which was built in 1971 as an elementary building. Attempts have been made to adapt the building to the middle school philosophy of a school-within-a-school. Each grade level has been assigned a wing as their grade level house. However, the science labs are located in one area of the building, and the seventh and eighth grade students must come into the sixth grade wing for their science classes. The increasing growth rate in the district has caused overcrowding, thus using every room in the building throughout the day. Consequently, several teachers are not assigned to their own classroom and must transfer their materials on carts from room to room.

The middle school is one of four schools in the district. The other three schools are K-5 elementary schools. Class size range from 14 to 30 students with 112 teachers instructing in the district. Approximately 15.1% are male and 81.9% female. The ethnicity of the staff is 98.2% White, 0.9% Black, and 0.9 Hispanic. A total of 2,330 students are enrolled in the district. Of these, 84.5% are White, 7.4% Black, 5.1% Hispanic, 2.9% Asian/Pacific Islander, and 0.2% Native Americans. Economically, the district enrollment for low income is 8.6%. The attendance rate is 96.3%, and the truancy rate is 0.1% with a mobility rate of 17.8%. Academic achievement is assessed through standardized

test scores and indicate that all levels score above the state requirements.

Site B School Setting

Site B is a high school that houses the 9th through the 12th grades and has a population of 2,390 students. Of these, 65.1% are White, 31.7% Hispanic, 2.1% Asian/Pacific Islander, 1% Native American, and 0.1% Black. Approximately 19.6% of the students receive free or reduced-priced lunch. The operating expenditures per pupil is $8,257. The school's student attendance rate is 88.1%, and the truancy rate is 24.4%; mobility rate is 42.4% due in part to a dropout rate of 11.1% and also Spanish speaking immigrants enrolling throughout the year. Approximately 10.5% of the students are designated limited English proficient. Another factor of interest, several large industries have closed in the area resulting in unemployment which caused families to relocate.

The school has 157 certified staff members: 17 special education teachers, two librarians, one bilingual teacher, one school psychologist, two social workers, one speech therapist and 11 industrial technology teachers. In addition, there are 15 support staff members which include 13 special education aides, one peer mediator, and one truant officer. Within the school district, the average teaching experience per instructor is 12.8 years. Approximately 43.6% of the district's teachers hold bachelor's degrees and 56.4% have masters' degrees and above. The average teacher salary in the district is $51,852. Furthermore, the school has an administrative council which includes a principal, assistant principal, business manager, personnel/human

resource manager, director of curriculum and instruction, director of grants and special programs, five deans of students, and five guidance counselors.

The school houses the ninth, tenth, eleventh, and twelfth grades. The students follow one of the following tracks: college preparatory, vocational education, or general education. The core program includes four years of English and at least three years of mathematics, social studies, and natural sciences. The students must earn 20 units of credit to graduate; 68.1% of the students graduate. The extracurricular activities available include football, baseball, basketball, soccer, softball, swimming, wrestling, badminton, volleyball, cross country, gymnastics, tennis, bowling, golf, cheerleading, and pom pons. Co-curricular activities include chess team, math team, scholastic bowl, speech team, yearbook, foreign language clubs, aviation club, varsity club, Students Against Drunk Driving, Snowball club, dance club, band, chorus, orchestra, drama club, the newspaper, HERO club, international club, jazz choir, Key club, media club, music club, outdoors club, peer mediation club, photo club, problem solving club, assembly club, Awaken Your Mind club, the Bible club, the Big Brothers/Big Sisters club, color guard club, ecology club, and the film and video club.

The school building is a two story structure containing over 300 classrooms which occupy 489,000 square feet. The school houses an Olympic size swimming pool and an indoor track. The classrooms are blocked according to department. If a teacher teaches in more than one department, they have a classroom in each

of those department areas. However, due to overcrowding several teachers must share rooms.

The school and one other high school comprise the district. The average class size is 24 students. Gender differentiation for the 304 teachers includes 59.1% female and 40.9% males. Approximately 98.4% of the teachers are White, 1.3% Hispanic, and 0.3% Asian/Pacific Islanders. There are no Native American or Black teachers in the district. Economically, the district enrollment for low income students is 40.9%. The attendance rate for the district is 88.1%; truancy rate is 19.0%, and student mobility rate is 46.7%. Academic achievement is assessed through standardized test scores which indicate that the students' achievement is below the state's standards in all areas.

The Surrounding Community

Site A Community Setting

Site A is in a small, rural village where 2,184 households exist. The community's population is 7,100. Of these residents,8.3% are five years old and under, 23.6% six to 17 years old, 63.2% 18 to 64 years old, and the remaining 4.8% over 64 years of age. The average income per household is $46,700. The percentage of residents over 25 years of age who have completed only high school is 40.2%. Approximately, 15.7% of the residents have had some college, and 14.3% have had four years of college or post graduate work. The percentage of residents in white collar jobs is 64.8%. (White collar jobs are designated as managerial/professionals, sales technicians, administrative supports and service occupations.) The remaining 35.2% are employed in blue collar fields which include:

farming/forestry/fishing occupations, small boat repair, operators and fabricators, and laborers.

Site B Community Setting

Site B is located in a large, urban area which is a suburb of a major Midwest metropolitan center. Students come from six neighboring suburban communities. Demographics for these communities are similar to those of the school's host city which has a population of 35,073 citizens. Of these residents, 92.1% are Caucasian and 7.9% Hispanic. There is an average of 2.34 persons per household with approximately 6.2% of the residents being five years old or under, 16.2% six to 20 years of age, 23.5% 21 to 34 years of age, 23.1% 35 to 54 years of age, 21% 55 to 74 years of age and 10% 75 years of age and older. The median age of the residents is 37.8 years old. Economically there are 3.9% of the households with an income of less than $5,000. In addition, 8.2% of the households have an income of $5,000 to $5,999, 8.2% an income of $10,000 to $10,999, 18.2% an income of $15,000 to $24,999, 17.4% an income of $25,000 to $34,799, 20.3% an income of $35,000 to $49,999, 17.8% an income of $50,000 to $74,999, and 6.0% an income of $70,000 or more. Because of the limited amount of industry in the city, the residents are compelled to seek employment outside of it.

National Context of the Problem

The problem of students' failing to take responsibility for their learning and exhibiting a lack of engagement in the learning task is a widespread problem that is a concern for all teachers. In 1996, Zarohorik reported that "Obtaining and holding students' attention, involvement, and cooperation are concerns of all teachers" (p. 551). However, Finn, Pannozzo, and Voelkl (1995) report that this problem receives little attention from researchers or the authors of classroom management textbooks. In addition, although student engagement is easy to recognize, it becomes difficult to describe and quantify (Sandholtz, Ringstaff, Dwyer, 1997). Newmann reported (as cited in Sandholtz et al., 1997) that

> Engagement is difficult to define operationally, but we know it when we see it, and we know when it is missing. Students are engaged when they devote substantial time and effort to a task, when they care about the quality of their work, and when they commit themselves because the work seems to have significance beyond its personal instrumental value. (p. 1)

Teachers often use "time-on-task" as a measure for engagement. Wilson states (as cited in Sandholtz et al.) that "on-task behavior can be defined as the time a student spends actively looking at some appropriate instructional object or person. . . If students have their eyes closed or oriented toward a window, door, floor, or a nonparticipating classmate, they are considered off-task. . ." (p. 1-2).

Students who are off-task are often labeled by teachers as inattentive. Finn, et al. (1995) state that inattentive students

are "individuals who fail to engage in learning activities or who may even strive to disengage" (p. 421). Student disengagement is a cause for concern because McGarity & Butts report (as cited in Sandholtz et al., 1997) that "student engagement is recognized by teachers and researchers alike as an important link to student achievement and other learning outcomes" (p. 1).

Disengagement may also cause problems such as depressed academic performance, absenteeism, truancy, dropping out, or disruptive behavior in class. However, the inattentive student often attempts to go unnoticed in class, and this then compounds the problem because the situation often goes unresolved because it is not interrupting the classroom activity (Finn et al., 1995). The Far West Laboratory report (as cited in Sanholtz et al., 1997) shows that

> In related studies of student engagement, researchers have examined Academic Learning Time (ALT)--a variable that combines time-on-task with student success rate--and its relationship to student achievement. The Beginning Teacher Evaluation Study contends that the amount of time a student spends successfully performing relevant and appropriate academic tasks is positively related to basic skills achievement. (p. 2)

Due to the potential dire consequences of disengaged students, researchers and teachers are attempting to discover the causes of student disengagement. Several possible causes have been cited in the research. Foremost among them is boredom. USA Today reports that "Our teachers are boring our kids. . . Far too many schools lack student-centered learning in which the objective is to engage

students directly in the educational process" (1997, October, p. 13A). Lumsden (1994) also states that "Unfortunately, as children grow, their passion for learning frequently seems to shrink. Learning often becomes associated with drudgery instead of delight" (p.1) In addition, Zahorik (1996) reports that people can become engaged if the activity is interesting to them. He goes on to say that "a major factor causing interest is novelty" (p. 552). Although other factors may be a cause of student disengagement, boredom is shown to be a leading cause. USA Today (1997) reports that student-centered learning is a possible solution to the problem of student engagement.

> Kids enjoy school more because they are actively involved in their education, overall test scores improve, and behavioral and dropout problems decline. Significantly, students retain more of what they learn because they understand its relevance and application in the real world. (p. 13A)

CHAPTER 2

PROBLEM DOCUMENTATION

Problem Evidence

A pretest, student surveys, teacher surveys, and case studies were compiled over a three week period to document the extent of students exhibiting a lack of engagement and ownership in the learning process.

To identify the students' dispositions and skills regarding a research assignment a pretest was created. A copy of the pretest is located in Appendix A. Included with the pretest, in Appendix B, is the scoring rubric used to determine the students' knowledge of, and disposition to use, necessary steps to complete an assignment. The depth and breadth of students' efforts on the assignment suggests that the students are more engaged and show a stronger ownership in their learning. Table 1 shows the results of the pretest. To investigate these data turn to page 12.

Of the 27 students tested at Site A1, 56% scored in the good to very good range, and of the 18 students tested at Site A2, 72% scored in the same range. However, of the 29 students tested at Site B, only 49% of the students scored in the good to the very good range. In addition, 41% of the students at Site A1 showed less engagement by scoring in the poor to satisfactory category, and Site A2 had 28% of the students scoring in the same range. Site B showed 69% of the students received scores within the poor to satisfactory range. Due to the fact that Site A1 and A2 are located in the same building with a documented scope and sequence program, the data suggest that improvement is related to the consistency of the curriculum. Although Site B is a high school,

Table 1

Number of Students in Each Score Class; Pretest, September 1998

Scores	Site A1		Site A2		Site B		Total	Total
	# scores	%	# scores	%	# scores	%	Students	%
Very Good 30-28	4	15	8	44	4	14	16	22
Good 27-25	11	41	5	28	4	14	20	27
Fair 24-22	9	33	4	22	7	7	20	27
Poor 21-19	1	4	1	6	12	12	14	19
Unsatisfactory 1-18	2	7	0	0	2	2	4	5
	N=27		N=18		N=29			

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the students scored lower than the middle school students at Site A1 and A2. This may be due to the fact that the students chose not to be engaged because doing well in school may not be culturally accepted; another consideration might be the fact that the curriculum is not consistent due to the fact that there are six feeder schools entering Site B.

Based on the results of the pretest, the two lowest scoring students from each site were chosen as case studies. These students are being observed for engaged behaviors and journal entries are being kept daily. The engaged behaviors being observed include bringing supplies to class, beginning and completing work on time, checking work for accuracy, asking questions and participating in class, persistence on tasks, accepting ideas, listening with understanding, transferring knowledge, and verbalizing thinking.

To determine the students' awareness of their engagement and ownership in the learning process a student survey was conducted. The surveys were completed within the second week of school, but were based on the students' conceptions of themselves as learners over the course of their entire educational career. An example of the student survey is located in Appendix C. Table 2 shows the results of the students' surveys; to view these data turn to page 14.

Table 2 identifies learner characteristics that have been categorized into three levels of engagement, listed from lower to higher level of engagement. (Three engagement characteristics are found within each level.) A majority of the students at all three sites reported that they were engaged to some degree in level one

Table 2

Students' Perception of Frequency of Engagement Behaviors

INDICATORS	SITE A			SITE A2			SITE B		
	F	S	N	F	S	N	F	S	N
I bring correct supplies to class.	.81	.19	.00	.89	.11	.00	.90	.10	.90
I begin and complete work on time.	.93	.07	.00	.67	.26	.06	.54	.55	.54
I check complete work for accuracy.	.33	.67	.00	.33	.61	.06	.21	.76	.03
I ask questions and participate in class.	.22	.78	.00	.56	.44	.00	.14	.76	.10
I keep trying and do not give up easily.	.67	.33	.00	.50	.50	.00	.72	.28	.00
I accept additional ideas to solve problems.	.67	.33	.00	.50	.50	.00	.59	.38	.03
I listen to others with understanding.	.41	.59	.00	.39	.61	.00	.80	.21	.00
I use knowledge already learned in new situations.	.48	.48	.03	.50	.44	.06	.34	.66	.00
I am aware of my own thinking when solving problems.	.37	.63	.00	.28	.67	.06	.38	.59	.03

F= Frequently
S= Sometimes
N= Never

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characteristics. Sites A1 and A2 students reported that they were frequently or sometimes engaged in the level two characteristics. Case studies from Site A1 and A2 also support this finding. Site B students indicated some engagement; however, some students expressed that they were never engaged in these learner behaviors. The final level of learner characteristics showed that a majority of the students indicated that they were less engaged at level three. However, 80% of the students at Site B expressed that they were frequently engaged in listening to others with understanding. One case study at Site B supports this data. The data suggests that students feel they are engaged in their learning a significant amount of the time. This may be due to the fact that the students were given the option of "never" on the survey and this is rarely chosen because it is an absolute. For instance, within all six case studies, "never" was chosen only twice as a response. In addition, the students' answers may be a result of their not wanting to portray themselves in a negative way. This is also evidenced through case study data. From the student/teacher survey data, students in the case studies reported themselves as being more engaged than their teachers reported them.

Teacher surveys were completed to determine the teachers' observations of the students engagement and ownership of the learning process within the first three weeks of school. Appendix D contains the teacher survey used. Table 3 represents the results complied from the teachers' survey; to view the data turn to page 16.

Table 3 identifies learner characteristics organized into

Table 3

Teachers' Perception of Frequency of Student's Engagement Behaviors

INDICATORS	SITE A1			SITE A2			SITE B		
	F	S	N	F	S	N	F	S	N
Brings correct supplies to class	.59	.41	.00	.67	.33	.00	.60	.37	.00
Begins and completes work on time	.30	.67	.04	.56	.39	.06	.53	.33	.13
Checks completed work for accuracy	.22	.63	.15	.50	.44	.06	.43	.40	.17
Asks questions and participates in class	.11	.67	.22	.61	.39	.00	.13	.37	.50
Keeps trying and does not give up easily	.11	.74	.15	.72	.28	.00	.53	.47	.00
Accepts additional ideas to solve problems	.00	.00	100	.22	.78	.00	.03	.97	.00
Begins and completes work on time	.11	.74	.15	.33	.67	.00	.50	.50	.00
Uses knowledge already learned in new situations	.00	.04	.96	.50	.50	.00	.00	100	.00
Is aware of and can verbalize own thinking	.04	.48	.48	.17	.83	.00	.17	.83	.00

F=Frequently
S=Sometimes
N=Never

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three levels of engagement. The characteristics are listed from lower level to higher engagement characteristics. Teachers reported level one characteristics were being done frequently or sometimes by a majority of the students. However, each teacher reported a small percentage of students failing to demonstrate these behaviors. Furthermore, level two characteristics were remarkably different among the sites. Site A1 shows that most of the students need improvement in level two characteristics. For example, students in the case studies scored in the sometimes to never ranges. This may result from the fact that Site A students are sixth graders who are new to the school and are learning how to organize themselves within a middle school structure. The teacher reported 100% of the students failed to accept more than one idea to solve a problem. Based on the three week time frame, this behavior was not observed. Site A2 reported a majority of the students frequently demonstrated level two behaviors . However, 78% of the students showed accepting more than one idea to solve a problem "occasionally". Site B reported that the students were engaged in level two behaviors with the exception of 50% of the students never asking questions or participating in discussions. In regards to level three characteristics, the data suggests that the students at Site A1 need to improve on these higher level characteristics. Site A1 case studies show these students as receiving "never" in level three behaviors. Due to the lack of opportunity to observe within the three week time frame, Site A1 data may appear to be out of alignment. However, the data for Site A2 and Site B suggests that the students are "occasionally" engaging in the higher level behaviors. Site A1

and Site B case studies show students scored in the "sometimes" category. This data may result from the lack of opportunity to observe within the three week time frame.

Probable Causes

Several underlying causes for students exhibiting a lack of engagement and ownership in the learning process in the school setting was suggested in the literature. After analyzing the possible causes, four categories surfaced: educational decisions, student attitudes, family issues, and societal issues.

Several possible causes for students exhibiting a lack of engagement and ownership in the learning process surfaced within the category of educational decisions. One educational decision that is a possible cause is an inappropriate level of challenge (Erb, 1998; MacIver & Reuman, 1993/1994; Okolo, Bahr & Gardner, 1995; Rimm, 1997; Turner & Meyer, 1995; Whalen, 1998). According to Whalen (1998), "states of imbalance between challenge and skill yield feelings of anxiety, boredom, and apathy" (p.25). This is true regardless of lack of challenge or too much challenge (Rimm, 1997). Another possible cause is student lack of control over the learning environment (Erb, 1998; Fulk & Montgomery-Grymes, 1994; Turner & Meyer, 1995; Whalen, 1998). "Middle grades students are developing a greater desire for autonomy and independence yet many instructional practices are tightly teacher controlled" (Turner & Meyer, 1995, p. 18). According to Fulk & Montgomery-Grymes (1994), "students who believe they have little control over academic outcomes exhibit little enthusiasm for the learning process" (p. 28). The literature also suggests that if curriculum lacks

connections to the real world students may exhibit a lack of engagement or ownership in the learning process (A close look..., 1997; Silver, 1998). If students do not perceive the class work to be relevant, they will not engage fully with the task.

Student attitude is another category of possible causes for students exhibiting a lack of engagement and ownership in the learning process. One cause may be an increase in socializing.

> A common pattern in early adolescence seems to be that as social motivation increases, academic motivation decreases. The coincidental timing of these motivational changes has led to a commonly held belief that they are causally related; that is, increased concern for the social realm is, in fact, responsible for a drop in academic motivation. Focusing on the peer group and on relationships, it is often argued, interferes with students' ability to concentrate on learning. (Hicks, 1997, p. 19)

Passive student learners are also mentioned as a possible cause of disengaged students. Students often enter the classroom expecting to be passive recipients of the teacher's knowledge (Promoting an active..., 1997). If students are not actively involved in the learning process, they will fail to engage or take ownership of their learning. In addition, a lack of work ethics may be an underlying cause of the school setting problem. Some students have a skewed perception of the connection between effort and outcome. These students view smart as "easy" (Rimm, 1997).

The third category to be generated by the list of possible underlying causes is family issues. These causes are related to parental behaviors. According to Rimm (1997), "A most lethal

cause of student underachievement is parents' lack of support for schools and teachers. Disrespect for education by parents sabotages educators power to teach" (p. 20). Parents must value education in order for their children to value it. Lack of parental supervision is also stated in the literature as a possible cause for the school setting problem (Garbarino, 1997; Reed & Johnson, 1992; Reed, MacMillan & McBee, 1995). According to Garbarino (1997),

> Some studies report a 50 percent decrease over the past 30 years in the amount of time parents are spending with kids in constructive activities. The lack of adult supervision and time spent doing constructive, cooperative activities compounds the effects of other negative influences in the social environment of kids. (p. 14)

The lack of quality time spent with adult role models negatively effects students' academic performance.

The fourth and final category to be generated by the list of possible causes is societal issues. An issue that may cause students to lack engagement and ownership in the learning task is peer pressure (Marshall, 1998; Rimm, 1997). As stated earlier, socializing is an important aspect of students' school experience. Due to students' need for acceptance, some students fail to achieve because of peer pressure not to achieve (Rimm, 1997). For instance, according to Marshall (1998), "Too many students do not complete learning assignments because of the peer culture" (p. 33). If achieving in school is not socially acceptable, then many students choose not to achieve. Another societal issue that is a possible cause of disengaged student behavior is cultural

adversity (Abi-Nader, 1991; Whalen, 1998; Williams & Wood, 1997). Williams & Woods (1997) note that the current perceptions of urban students is that they are "at risk, lacking abilities, unmotivated, and culturally deprived" (p. 29). These students often lack the background knowledge necessary to relate to content or materials used in the classroom. Bowman (as cited in Williams & Woods, 1997) noted that

> Children from inner-city communities, for example, often do not come to schools or centers having had the experiential background that ties easily to the reading materials considered most appropriate for young children. Books focus on baby animals, zoo animals, pets, milkmen, kind policeman, grass, and flowers - ideas and concepts not frequently encountered in the children' daily lives. When children do not have the relevant background, they do not learn "naturally," ... the way teachers ... expect. (p.30)

Finally, electronic media distractions were also discussed in the literature as a possible cause of students exhibiting a lack of engagement and ownership in the learning process. According to Whalen (1998), "electronic media has proliferated into every corner of teenage life. Where teachers once competed with T.V. from a distance, they now contend with the instant feedback of computer games" (p. 22).

In conclusion, the following possible causes should be noted when selecting a solution:

*lack of student control over the learning environment

*instructional practices mismatched with characteristics of school students

*curriculum lacks connection to real world/relevancy

*increase in socializing

CHAPTER 3

THE SOLUTION STRATEGY

Literature Review

After reviewing the literature dealing with disengaged and/or unmotivated students, numerous solutions to the problem of students exhibiting a lack of engagement and ownership in the learning process were discovered. The solutions generated tended to fall within one of three general categories: climate, content, and teacher behaviors.

The area of climate dealt with solutions focusing on the atmosphere within the classroom and between the students and/or teacher. The pretext behind these solutions suggests that in order for students to be engaged and take ownership of the learning process the climate must be conducive for this. The literature often mentioned creating a positive classroom environment (Erb, 1995; Okolo, Bahr & Gardner, 1995; Promoting an active..., 1997; Whalen, 1998). Ornstein (1996) recommends that one way to accomplish this is to reduce competition. By reducing competition and recognizing individual potential and effort, the students will feel less pressure and are more likely to succeed. Another way to create a supportive environment according to Lumsden (1994) is to use humor. By using humor, the classroom becomes an enjoyable place where students want to be involved. In order for students to feel secure in the classroom and become involved, they must have a sense of belonging (Rinne, 1998). This can occur when there has been a conscious effort to promote positive student-to-student and student-to-teacher interactions (Erb, 1995; Promoting an

active..., 1997; Rinne, 1998). According to *Promoting an Active Learning Environment* (1997), this can be accomplished by allowing students opportunities to get to know each other such as through pair-share activities or class interviews. In addition, teachers can engage students in conversations outside of class and show interest in their students as individuals.

Another solution that falls within the realm of climate is encouraging risk taking. Fulk & Montgomery-Grymes (1994) states,

> A nonthreatening, positive classroom environment that encourages risk taking is conducive to motivation. Refrain from criticism or calling attention to poor performance. When failure occurs in spite of reasonable expenditures of effort, help students to accept that failure is a natural part of learning a difficult skill. Provide constructive suggestions for improvement combined with reteaching or task-specific strategy instruction as needed. (p. 32)

Furthermore, a solution that is related to encouraging risk taking is having teachers provide praise and feedback to the students (Fulk & Montgomery-Grymes, 1994; Lumsden, 1994; MacIver & Reuman, 1993/1994; Okolo et al., 1995; Ornstein, 1996; Schunk & Cutshall, 1997; Tjeerdsma, 1995; Whalen, 1998). According to Harter (as cited in Tjeerdsma, 1995), "positive reinforcement for task attempts results in high motivation levels" (p. 37). This feedback is motivational because it conveys to students that they are competent and can learn (Schunk & Cutshall, 1997). However, the literature also shows that if students are excessively praised or praised for tasks that are easily performed then the praise tends to be discounted and interpreted as a sign that the student

lacks ability (Lumsden, 1994; Okolo et al., 1995). Praise is effective in creating a positive classroom environment if used sincerely, but it can have damaging effects if used insincerely.

Another aspect of creating a positive climate that was discussed in the literature as a solution to engaging students was goal setting (Ablard & Lipschultz, 1998; Fulk & Montgomery-Grymes, 1994; Lumsden, 1994; MacIver & Reuman, 1993/1994; Okolo et al., 1997; Ornstein, 1996; Plucker, 1998; Schunk & Cutshall, 1997, Whalen; 1998). Goal setting allows students to improve their performance as well as their motivation. Teachers should assist students in setting reasonable short term goals that incorporate specific performance standards (Fulk & Montgomery-Grymes, 1994; Okolo et al., 1995). According to MacIver & Reuman (1993/1994), "The way to get individuals to truly do their best is to set a challenging, quantifiable goal that demands the maximum use of their skills and abilities" (p. 24). However, the research has also shown that students who set their own goals perform better than students with teacher-assigned goals (Okolo et al., 1995). In order to maximize the effectiveness of goal setting, teachers must teach students to set individual, challenging, short-term goals that are performance based. In addition, teachers should teach students to self-evaluate (Schunk & Cutshall, 1997; Turner & Meyer, 1995; Williams & Woods, 1997). According to Schunk & Cutshall (1997), "Self-evaluation refers to comparing one's progress with one's goal and judging whether progress is acceptable" (p. 126). By allowing self-evaluation, teachers also convey the idea that students are serious about their progress,

that they have expertise, and that teachers respect their opinions (Turner & Meyer, 1995).

Setting goals also helps teachers implement the next solution recommended in the literature which is setting and maintaining high teacher expectations (Erb, 1995; Fulk & Montgomery-Grymes, 1994; Okolo et al, 1995). The best way to ensure that high expectations are set and maintained is to make sure that the expectations are clear, explicit, and understandable. In order to accomplish this, teachers should teach procedures, post rules, and review them when needed (Okolo et al, 1995). In addition, students as well as teachers should maintain expectations of success (Erb, 1995; Lumsden, 1994; Ornstein, 1996; Tjeerdsma, 1995; Whalen, 1998). Teachers can help students do this by stressing that learning takes time but persistence usually results in success. Teachers should also focus on the progress of students not on comparing them (Lumsden, 1994).

The final solution suggested by the literature to engage students in the learning process was to incorporate social elements and activities (Hootstein, 1994; Rinne, 1998; Turner & Meyer, 1995; Whalen, 1998). Social relationships with peers are important to students, and research has shown that students can and do learn from each other (Turner & Meyer, 1995). By working together, students must participate and work as a team in order to succeed. It also reduces anxiety and stress creating a positive working environment (Ornstein, 1995).

Content is the second category under which the recommended solutions fall. Through curriculum and teaching strategy choices, teachers can improve engagement and ownership in the learning

process. One solution to student engagement that was repeatedly recommended was making the content relevant and interesting to students (Fulk & Montgomery-Grymes, 1994; Hick, 1997; Hootstein, 1994; Lumsden, 1994; Okolo et al., 1995; Rinne, 1998; Schunk & Cutshall, 1997; Silver, 1998; Whalen, 1998; Williams & Woods, 1997). Hootstein (1994) suggests several strategies to make learning relevant and fun. For instance, it is recommended that the learning task is related to the students' interests, concerns, and experiences. In addition, the teacher should, according to Brophy (as cited in Hootstein, 1994), "explain why the content is interesting, informative and valuable" (p. 32). Teachers should also model the value of learning by being enthusiastic and interest the students by stimulating their curiosity by making the content surprising or novel. Another content solution that was often recommended and would help capture the students' interest was varying instructional learning activities (Fulk & Montgomery, 1994; Lumsden, 1994; Okolo et al., 1995; Ornstein, 1996; Reed & Johnson, 1992; Rimm, 1997). This helps students to pay attention and renews their interest (Ornstein, 1996).

Another content decision that will help engage students in the learning process is to challenge students at an appropriate level (Ablard & Lipschultz, 1998; Fulk & Montgomery-Grymes, 1994; MacIver & Reuman, 1993/1994; Oldfather, 1993; Ornstein, 1996; Rimm, 1997; Tjeerdsma, 1995; Turner & Meyer, 1995; Whalen, 1998). When instruction goals are congruent with students' skill levels, many more students willingly engage in challenging work (Turner & Meyer, 1995). According to Tjeerdsma (1995),

> A very high rate of success on a task may mean it is too easy for the students. Such tasks can produce boredom and decrease motivation. On the other hand, tasks that are too difficult for a student can lead to frustration and an eventual lack of effort. Tasks that match a student's ability level and optimally challenge the students produce the highest level of motivation. (p. 37)

Cooperative learning was also highly recommended as a solution to getting students engaged and taking ownership for their learning (Erb, 1995; Fulk & Montgomery-Grymes, 1994; Hicks, 1997; Rimm, 1997; Schunk & Cutshall, 1997; Tjeerdsma, 1995). "Peer relationships are an important source of support, companionship, and social development for adolescence. In fact, young people who do not form satisfactory peer relationships are more likely to be at risk for academic...problems in their later schooling" (Hicks, 1997, p. 19). Therefore, by allowing students the opportunity to interact within the classroom, the teacher is intrinsically motivating students. Students must also take ownership of their learning in order to complete their task.

The final content solution to helping students exhibit engagement and ownership in the learning process is to use strategies and create tasks that address the different intelligences through which students learn (Fulk & Montgomery-Grymes, 1994; Rimm, 1997). Howard Gardner (1993) identified eight intelligences by which people learn. Schools focus on two of these intelligences. In order to ensure that all students learn, the content needs to be taught through the use of all the intelligences.

> Unfortunately...so many students are not learning...This is due to the focus in our schools on two intelligences - verbal/linguistic and logical/mathematical. We are not teaching to all of the intelligences, areas in which these students have special abilities (Chapman, 1993, p. ix).

Teacher behaviors was another category that was generated as a solution. These solutions pertain to those actions decided upon and carried out by the teacher. For example, one way teachers can help students exhibit an increase in engagement and ownership in the learning process is to involve students in the learning process (Fulk & Montgomery-Grymes, 1994; Lumsden, 1994; Reed & Johnson, 1992; Silver, 1998; Turner & Meyer, 1995; Whalen, 1998). According to Silver (1998), this can be accomplished by using the discovery method. This method calls for the teacher to guide the students through three phases of a learning cycle: exploration, concept development, and concept application. The discovery method engages students because it arouses their interest and allows them to explore, discover, question, and discuss.

An additional solution that would involve students in their own learning and that was repeatedly suggested was empowering students and allowing them to have some control (Fulk & Montgomery-Grymes, 1994; Oldfather, 1993; Ornstein, 1996; Promoting an active..., 1997; Tjeerdsma, 1995; Tomlinson, 1998; Whalen, 1998). The literature states that students who believe they have control in a situation exhibit a higher level of motivation (Tjeerdsma, 1995). Students can be given a measure of control by allowing them choices in a number of ways. For example, students can be given an assignment menu where they may

choose from a list of acceptable options for selected assignments. Also, students could help set an assignment due date or choose partners in their group (Fulk & Montgomery-Grymes, 1994). According to Oldfather (1993),

> Students said that having choices was one of the main reasons they felt so motivated to learn. They were allowed many choices within the well-established structures and requirements of the classroom. Choices ranged from small to wide-open. (p. 678)

However, Lumsden (1994), states that although choice does give students a sense of personal control and an interest in learning, caution is recommended. If performance is stressed, students may choose less challenging tasks of diminished interest in order to compete with their classmates. This statement corresponds with another solution which states that teachers should focus on learning, understanding and improvement (MacIver & Reuman, 1993/1994; Tjeerdsma, 1995; Turner & Meyer, 1995). According to Turner & Meyer (1995), teachers should change their goal of getting the right answer to open-ended activities where the students must explain their thinking. When the focus has shifted, students begin to take risks and come to value their mistakes.

> Once they trusted that mistakes actually contributed to their progress they were willing to spend more time on complex tasks, they tried more approaches and strategies, used higher level thinking, and they were willing to redo projects to make them better. (p. 20)

Other teacher behaviors that may result in increased student engagement include teachers modeling interest and enthusiasm,

incorporating novelty, and using student names. When teachers model interest and enthusiasm for learning, they show that they value education and that they get personal satisfaction from specific learning activities. Enthusiasm can be shown by body movement, gestures, facial expressions and vocal expressions. This animation can help students develop enthusiasm for learning,too (Hootstein, 1994). Incorporating novelty also engages students by arousing their curiosity and stimulating their imaginations. Novelty is created when the lesson or activity is not part of the routine. However, there must be a balance. If the lesson is too similar it will appear routine, but if it is too different, it will appear "weird" and threatening (Rinne, 1998). In addition, using students' names helps to motivate them. Student names can be effective by simply using them when calling on or talking to a student (Hootstein, 1994). Also, student names can be incorporated into assignments or lessons (Okolo et al., 1995).

A controversial solution to student motivation which was discussed extensively in the literature was extrinsic rewards (Hootstein,1994; Lumsden, 1994; Okolo et al., 1995; Rinne, 1998). Rinne (1998) describes extrinsic rewards as "gimmicks that catch the student's interest by means of alluring activities or non-content-related rewards" (p. 621). Although many sources recommended using extrinsic rewards, most placed conditions on their use. For example, Okolo et al. (1995), recommended using extrinsic rewards only when necessary and to use the least powerful reward necessary to get the job done. Although research shows positive effects of rewards, other research shows a

detrimental effect of rewards on motivation. "Rewards can have a damaging effect on students' motivation when they are overemphasized, given in an arbitrary manner, or are the most plausible explanation for engaging in an activity" (p.282). The goal of teachers is to create lessons and activities that are intrinsically motivating. The content solutions listed previously are ways in which to accomplish this. For instance, according to Lumsden (1994) "teachers should gear tasks to students' interests, incorporate novelty and variety in tasks, give students opportunities to respond and receive feedback . . ." (p. 3). In addition, Rinne (1998) clarifies that intrinsic motivation is not necessarily "fun". The students do not necessarily "enjoy" their learning, but they are compelled to become involved in the learning task.

The final recommended solution to help engage students in the learning process is to increase parental involvement. According to Rimm (1997), "If parents have realistically high expectations, if they respect teachers and teachers respect them, and if children can be taught a healthy work ethic, despite the multiple problems in our society resilience and achievement can be taught" (p. 22). Although lack of parental support is often stated as a cause of unmotivated students (Brown & Walberg, 1993; Rimm, 1997), often this is an aspect of education that the teacher can not control. However, the teacher can attempt to bridge the gap between school and home by incorporating techniques that allows them to consistently communicate (Swanson, 1992).

Teacher behavior has a strong impact on student behavior. Various solutions to students who exhibit a lack of engagement and

ownership in the learning process can be attributed to teacher behavior. As the research shows, according to *Promoting an Active Learning Environment* (1997),

> The teachers who foster the greatest amount of learning . . . are those who show their interest in students as individuals, encourage them to state their opinions, encourage them to be independent, creative thinkers and let the students know that their understanding of the materials is very important to the instructor. (p. 2)

Project Objectives and Processes

As a result of increased use of teaching techniques that address student ownership in the learning process, during the period of September 1998 to January 1999, the middle school and high school students from the targeted classes will increase their learning engagement in communication arts and health, as measured by pre/post-tests, teacher/student surveys, and case studies.

In order to accomplish the project objective, the following processes are necessary:

1. Develop lessons that require goal setting for communication arts and health.
2. Develop a series of cooperative learning activities to improve engagement and ownership.
3. Provide opportunities for student choice in learning and assessment.

Project Action Plan

Target classes will be one-sixth grade communication arts class with 21-28 students, one seventh grade communication arts class with 21-28 students, and one ninth grade health class with 25-32 students. Working base groups will include 2-5 students in each group with group size adjusting according to task.

PROCESS STATEMENT ONE: Develop lessons requiring goal setting for communication arts and health.

WHY: To establish in school/out-of-school goal setting opportunities which are relevant for life long learners.

WHAT: The goal setting activities will include:

*creating a student portfolio

*training students in the use of goal setting procedures

*practicing writing goals

*practicing writing action plans to achieve these goals

*extending goals for longer durations

*reflecting on goals

WHEN: The techniques will commence in September 1998 and be on-going. Multiple classroom experiences will be provided in September and scaled back starting in October 1998.

PROCESS STATEMENT TWO: Develop a series of cooperative learning activities to improve engagement and ownership.

WHY: To provide opportunities for students to work together and obtain greater understanding of concepts.

WHAT: Students will be explicitly taught the following social skills:

*group forming skills

*listening skills

*team building skills

*group problem solving skills

Students will learn and practice the following roles:

*discussion director

*recorder

*materials manager

*encourager

*time keeper

After learning the skills, the students will implement them in the following ways:

*think-pair-share

*graphic organizers

*projects

*test reviews

WHEN: The techniques will commence in September 1998 with multiple experiences and will be scaled back beginning October 1998.

PROCESS STATEMENT THREE: Provide opportunities for student choice in learning and assessment.

WHY: To provide an opportunity for students to make relevant choices about their learning.

WHAT: Students will be given the following assessment choices:

*written tests

*written reports

*dioramas

*role plays

*posters

Students will be given the following choices for learning opportunities:

*topics for study

*partners

*group members

*assignment due dates

*method of presentation

WHEN: The implementation will begin in September and be on-going throughout the year.

Methods of Assessment

In order to assess the effects of the intervention, lessons that require goal setting for communication arts and health, as well as, cooperative learning activities to improve engagement and ownership will be developed. In addition, opportunities for student choice in learning and assessment will be provided.

CHAPTER 4

PROJECT RESULTS

Historical Description of the Intervention

The objective of this project was to increase student engagement in the learning process. The implementation of goal setting, cooperative learning and student choice were selected to effect the desired changes.

Goal setting was used to establish school/out-of-school goals that are relevant to life-long learners. Within the first two weeks of school, students were introduced to goal-setting procedures and were taught to write a goal and a specific action plan describing how the goal would be achieved. In the sixth grade and seventh grade communication arts classes, the students began by setting daily, individual spelling goals. Once the time frame for the goal had passed, the students wrote a reflection determining whether or not they achieved their goal and why this may have occurred. After practicing by setting several daily goals, the students continued practicing by setting weekly spelling goals. By October, the students were comfortable writing goals and action plans. The students then began setting longer term goals based on classroom achievement. These goals dealt with classroom behavior, academic scores, or study habits. A student sample is available in Appendix E.

In the ninth grade health class, the students began by setting a daily, group vocabulary goal. During the next class period, the students verbally reflected on their individual accomplishment or lack of accomplishment of the goal. Reasons for success or failure were discussed. After daily goals were practiced, the students began setting longer term goals. Due to

the age of the students and the ease with which they wrote their goals, by mid-September the teacher/researcher determined that the students were ready to set long term goals. A sample of the goal sheet can be found in Appendix F. These individual goals concerned personal growth dealing with the subjects covered in the health curriculum. Several topics covered in the goals were: nutrition, physical fitness, self-esteem, and personal hygiene. A sample of a student's goal can be located in Appendix G.

Cooperative learning was used to provide opportunities for students to work together and obtain greater understanding of concepts. In the sixth grade communication arts classroom, base groups of 3-4 students were established during the second week of school based on their seating assignment. Social skills and roles needed for task completion were taught and practiced. Appendix H contains a list of the social skills and roles needed for task completion. Several opportunities were provided over the next three weeks to practice and review the skills and roles. The number of cooperative opportunities were decreased by October, but still used approximately once weekly. The size and members of the groups changed based on the assigned task.

In the seventh grade communication arts classroom during the second week of school, the students began by working with a partner for two weeks to learn cooperative skills such as using six inch voices, listening to others, using encouraging words, completing roles, and allowing think time. A complete list of these skills can be found in Appendix I. After two weeks, base groups of 3-4 members were formed, meeting on alternating days to review and practice the skills. By October, the students were

meeting less frequently based on the assigned task.

During the second week of school the ninth grade health class began cooperative learning by establishing a base group of two students. The partners met once a week to review and practice social skills such as using six inch voices, listening to all ideas, helping each other stay on task, taking turns talking, knowing and doing their jobs, and using encouraging words. A complete list of the skills can be located in Appendix J. Due to the ease with which the partners worked, base groups of 4-5 students were established during the third week of school meeting on Fridays to complete a classroom assignment that was modified so that cooperative task groups were the instructional strategy used to accomplish the content objective. This arrangement continued throughout the semester.

Student choice provided an opportunity for students to make relevant choices about their learning. According to the original plan, students would be offered choices regarding partners, group members, assignment due dates, methods of presentation, and topics for study. In the sixth grade classroom, students were allowed choices at least once a week. These choices focused on partners, group members, assignment due dates, and assessment options. Appendix K shows a sample assessment option.

In the seventh grade class, students were provided multiple opportunities to make choices throughout any given week. These choices included assignment due dates, presentation options, and the creation of a grading rubric for a book report. A sample of the created rubric can be found in Appendix L.

In the ninth grade health class, student choice was offered at least once a week centering around partner selection, group member selection, assessment options, and topic choice. A sample of an assessment option can be found in Appendix M. Appendix N contains a sample of a topic choice.

Presentation and Analysis of Results

In order to assess the effect of goal-setting, cooperative learning, and student choice on student engagement, pre/posttests were given, and the scores were compared to those on the pretest. The complied data is presented in Table 4 on page 41.

According to the data, the intervention appears to have increased student engagement. At Site A1, 81% of the students scored in the good to very good range during the post-test as compared to the 56% in the pretest. Only 19% of the students scored in the lower three categories on the posttest as compared to 44% on the pretest. Site A2 had 88% of the students score in the good to very good range on the posttest as compared to 72% on the pretest. Twelve percent scored in the fair to unsatisfactory range on the post-test as compared to 28% on the pretest. At site B, 89% of the students scored in the good to very good range on the post-test as compared to 28% on the pretest. Only 11% of the students scored in the fair to unsatisfactory range on the post-test whereas 21% scored in that range on the pretest.

Another method used to show the effect of goal-setting, cooperative learning, and student choice on student engagement was survey. Students completed a survey (see Appendix C) in the beginning, during the middle and at the end of the intervention. The complied data from Site A1 is located in Figure 1 on page 43.

Table 4

Number of Students in Each Score Class, Pretest and Postest, 1998-1999

Scores	Site A1				Site A2				Site B				TotalTotal			
	Scores and Percentages				Scores and Percentages				Scores and Percentages				Results			
	Pre		Post		Pre		Post		Pre		Post		Pre		Post	
Very Good 30-28	4	.15	9	.33	8	.44	8	.47	4	.14	14	.54	16	.22	31	.44
Good 27-25	11	.41	13	.48	5	.28	7	.41	4	.14	9	.35	20	.27	29	.41
Fair 24-22	9	.33	5	.19	4	.22	1	.06	7	.26	3	.11	20	.27	9	.13
Poor 21-19	1	.04	0	.00	1	.06	1	.06	12	.45	0	.00	14	.19	1	.01
Unsatisfactory 1-18	2	.07	0	.00	0	.00	0	.00	2	.20	0	.00	4	.05	0	.00

N=27 N=17 N=26

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The data in Figure 1 represent the percentage of students who answered sometimes and never on their survey for each given area. The remaining percentage of students answered frequently. Sometimes and never represent negative responses that indicate an inadequate behavioral response. According to these data, students' perception showed an improvement in asking questions, being persistent, transferring knowledge, and verbalizing thinking. However, there was no improvement shown for bringing supplies, completing work, accepting others' ideas, or listening to others. This may result from the fact that the sixth grade students at Site A1 completed the first checklist during the second week of school and were basing their answers on past experiences, which were gained in a self-contained classroom. By November, the students had acclimated to the middle school setting and were now basing their answers on this experience.

A teacher checklist was also used to assess student engagement (see Appendix D). Sometimes and never represent negative responses that indicate an inadequate behavioral response. The data complied from the teacher checklist at Site A1 can be seen in Figure 2 on page 44.

According to the teacher's perception the students at Site A1 increased the frequency with which they displayed the student engaged behaviors in all nine categories. This may be due to the fact that the last four categories had all received never answers in September because the teacher/researcher did not have the opportunity to observe these behaviors by the date of the first checklist. Also, in regard to bringing supplies and completing work, the students' and the teacher's perceptions may vary because

Figure 1

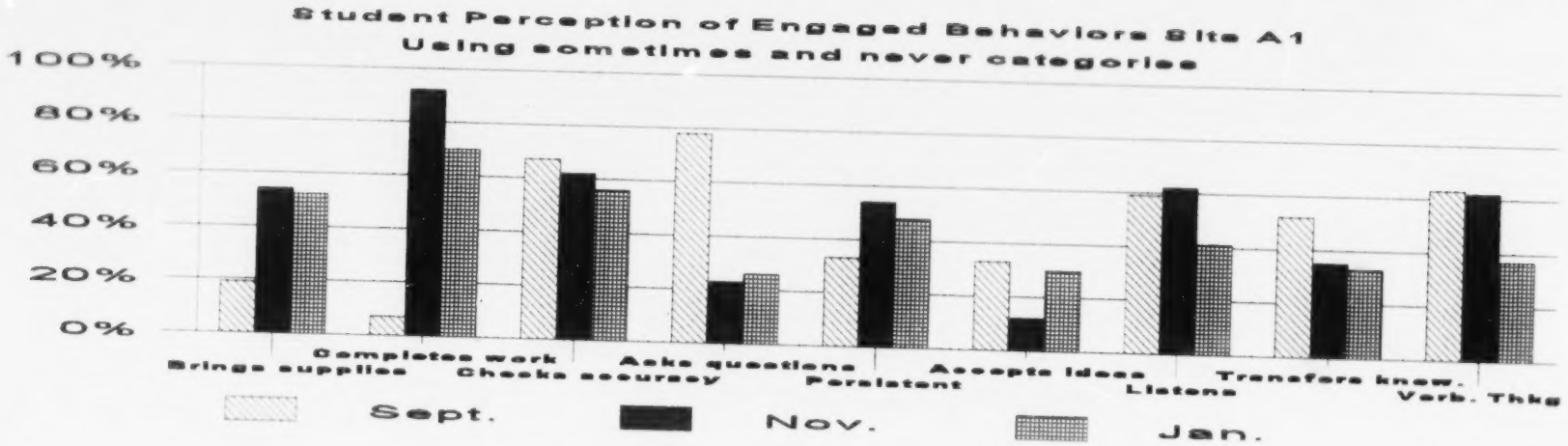

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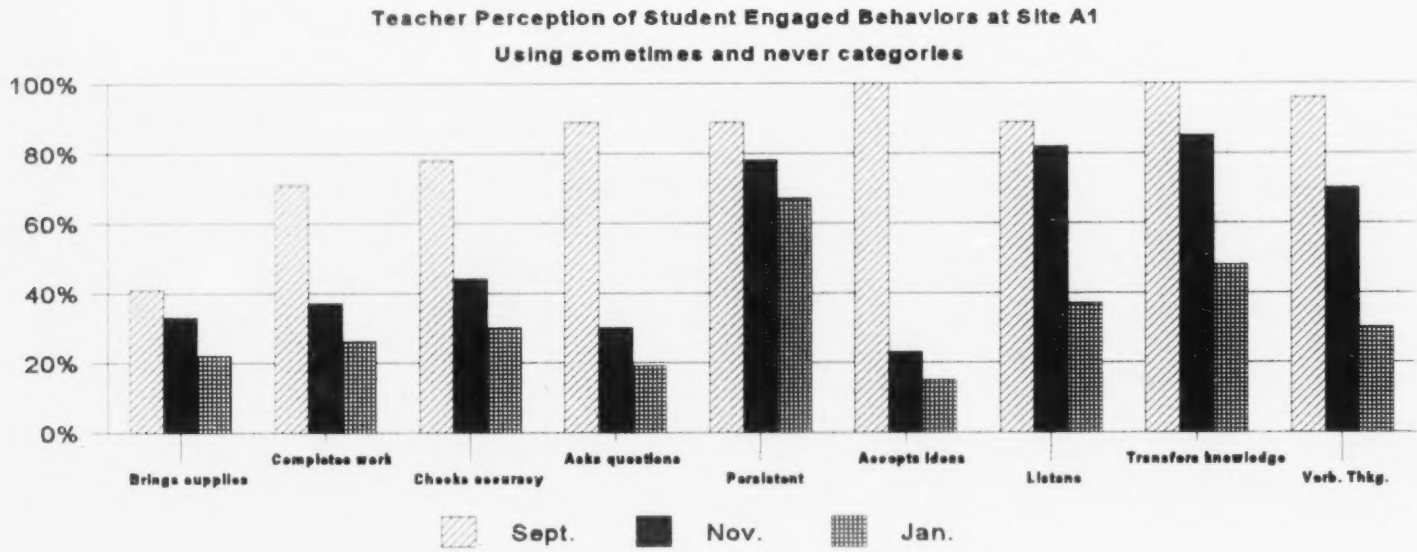
Figure 2



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the student's may have based their answers on their behavior in all of their classes not just the communication arts class on which the teacher/researcher based all of her results.

At Site A2 the student survey data are presented in Figure 3 on page 46. Sometimes and never represent negative responses that indicate an inadequate behavioral response.

According to the students' perceptions, they improved in all areas except bringing supplies, completing work, checking for accuracy, and listening. Student perception of bringing supplies may result from the fact that the teacher keeps supplies in the classroom for the students. Also, it is classroom policy to accept late work; therefore, many students may not perceive themselves as completing work on time.

At Site A2 the data compiled from the teacher checklist can be found in Figure 4; to view this data turn to page 47. Sometimes and never represent negative responses that indicate an inadequate behavioral response.

According to the teacher's perception the students improved in all areas except checking accuracy and persistence. In September, 60% of the students were not checking for accuracy; whereas, by January, 65% of the students were not checking for accuracy. In September, 28% of the students were not perceived as persistent; however, in November and January, 65% were not perceived as persistent.

At Site B the data compiled from the student checklists can be found in Figure 5; to view this data turn to page 48. Sometimes and never represent negative responses that indicate an inadequate behavioral response.

Figure 3

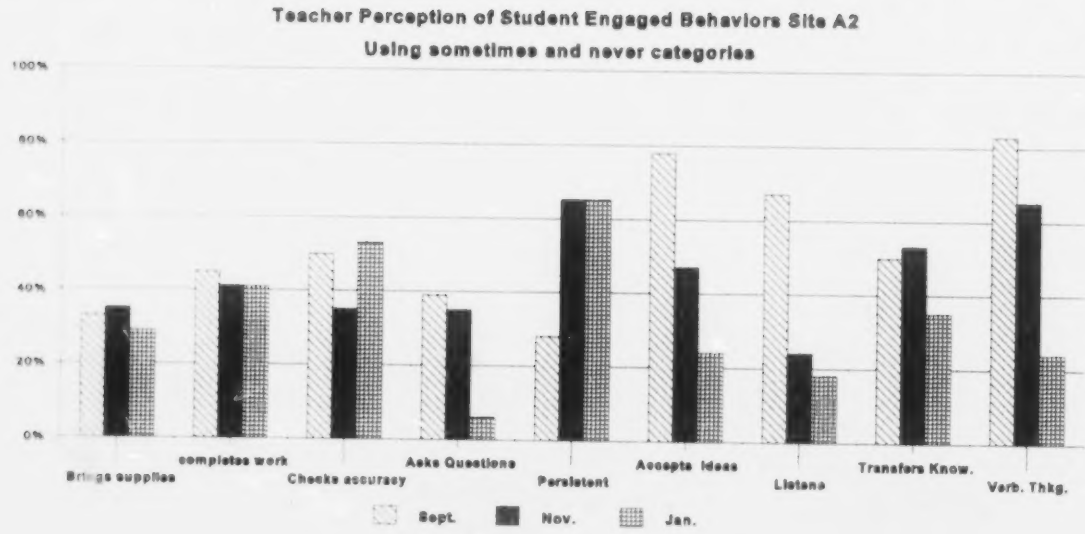

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Figure 4

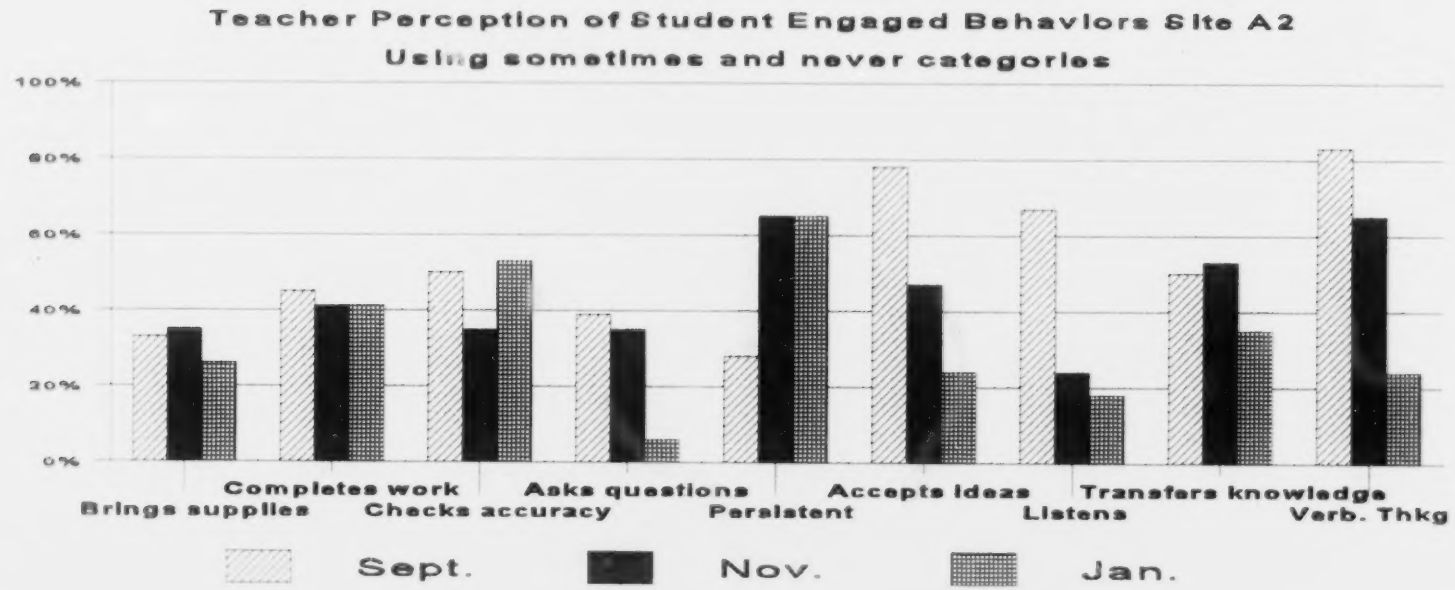
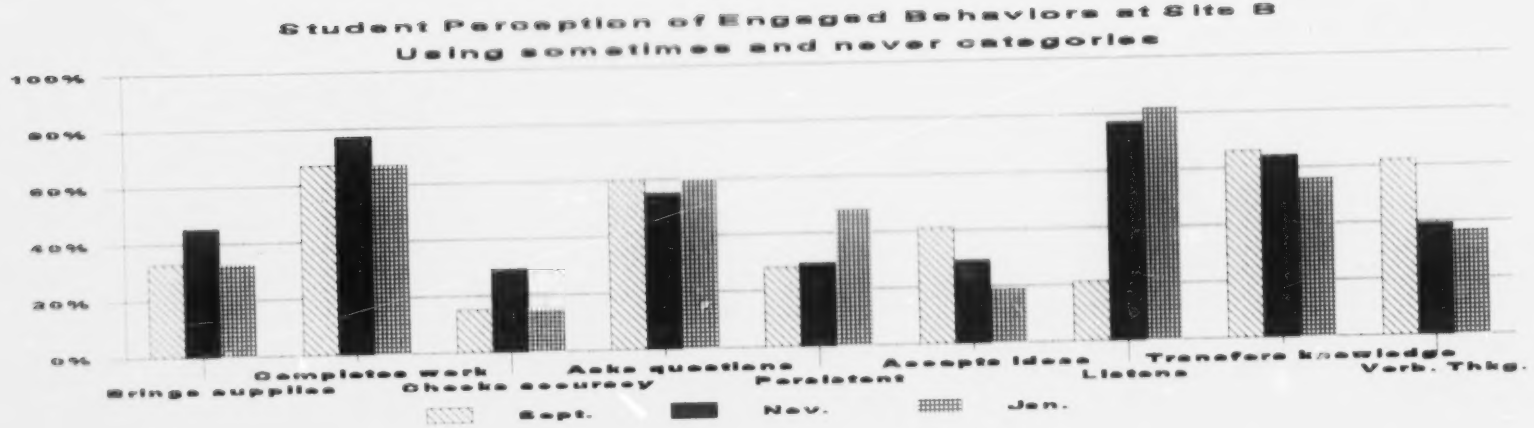

Teacher Perception of Student Engaged Behaviors Site A2
Using sometimes and never categories
100%
80%
60%
40%
20%
0%
Brings supplies
Completes work
Checks accuracy
Asks questions
Persistent
Accepts ideas
Listens
Transfers knowledge
Verb. Thkg
Sept.
Nov.
Jan.

Figure 5



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According to the students' perceptions they improved in all areas except persistence and listening. Twenty-eight percent of the students perceived themselves as not persistent in September as compared to 48% in January. This may be due to the fact that the students at Site B are freshmen in high school, and in September they are attempting to acclimate to the new environment. In September, 21% of the students perceived themselves as not listening. In January, 81% of the students reported themselves as not listening. This may be due in part to the fact that the health class is a semester course and in January the course ended.

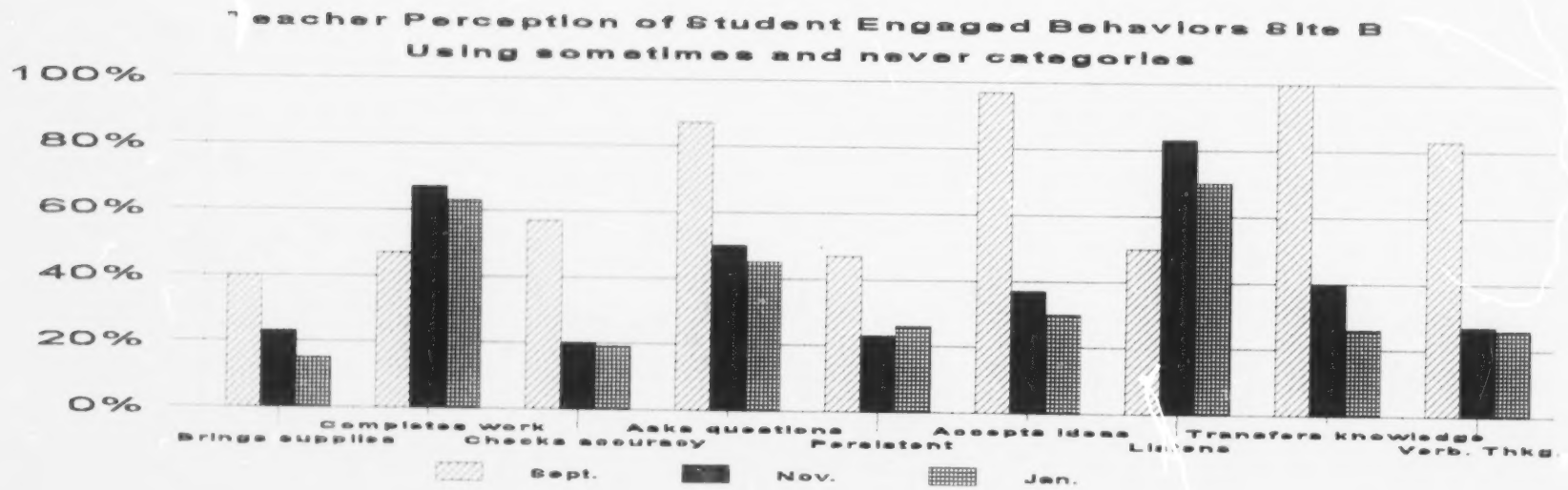
Teacher checklist data for Site B can be found in Figure 6 on page 50. Sometimes and never represent negative responses that indicate an inadequate behavioral response.

Based on the teacher's perception of the students' engaged behaviors, there was an improvement in all areas except listening. The teacher reported 50% of the students were not listening in September as compared to 71% in January. As previously stated, this may be due in part to the fact that the course is completed in one semester, and it concluded in January.

The final method used to assess the effect of goal-setting, cooperative learning, and student choice on student engagement was case studies. Two students were selected at each site based on the two lowest pretest scores. These students were observed for the engaged behaviors listed on the checklists.

At Site A1, the two case studies were a boy (Case Study 1) and a girl (Case Study 2). Both students showed improvement

Figure 6


Teacher Perception of Student Engaged Behaviors Site B
Using sometimes and never categories
100%
80%
60%
40%
20%
0%
Brings supplies
Completes work
Checks accuracy
Asks questions
Persistent
Accepts ideas
Listens
Transfers knowledge
Verb. Thkg.
Sept.
Nov.
Jan.

during the intervention. Case Study 1 was a poor writer. He had limited spelling skills and his handwriting was difficult to decipher. This may result in part for his low pretest score. He displayed student engaged behaviors frequently. He consistently brought supplies to class, completed assignments on time, and participated in discussions. He knew he was a poor speller, and he routinely brought his work up to be proofread. Case Study 2 proved to be a solid student. The pretest was low, but it did not represent the quality of work of which she was capable. She displayed the student engaged behaviors frequently. At the beginning, she was a quiet student, but by January she was outgoing and participated in class often.

At Site A2 the Case Study 1 was a boy and Case Study 2 was a girl. In September, all students in the seventh grade communication arts class completed a survey to determine individual study habits. A copy of the survey may be found in Appendix O. Based on this survey Case Study 1 showed very few study skills. His weaknesses appeared to be: beginning class work on time, bringing supplies to class, completing assignments on time, and participating in class. This student did show improvement over the course of the intervention. However, it was a slow process with inconsistent results. For example, he would set spelling goals and achieve them, and the next week he would revert to previous study habits and fail. Case Study 2 was an above average student. The survey showed that she had strong study habits. Her pretest did not represent her abilities. She consistently displayed the student engaged behaviors. She did

improve over the course of the intervention; however, the improvement was slight due to the fact that she displayed the behaviors frequently from the beginning. In addition, the multiple intelligences were studied in class. Case Study 2 saw her strength in the visual/spatial area, and she has incorporated this knowledge when choosing assignments.

At Site B both case studies were boys. Case Study 1 was an average student who scored low on the pretest. His weaknesses were failing to bring supplies to class and listening in class. These behaviors improved as the intervention continued. He showed greater improvement when cooperative learning was being used. Case Study 2 was a resource student with behavioral disorder. He had difficulty with all of the engaged student behaviors. For example, he rarely brought supplies to class, failed to complete assignments, and rarely began tasks without teacher direction. Also, he suffered from frequent absences. This resulted in a drop from class.

Conclusions and Recommendations

Based on the presentation and analysis of the data on student engaged behaviors, the students' showed a marked improvement in engagement. By incorporating cooperative learning into classroom assignments and by teaching social skills and roles, the students were more involved in the tasks. Supplies were brought to class with more regularity, and tasks were completed in a timely fashion more frequently. Cooperative learning also improved students acceptance of others' ideas as well as helped them verbalize their own thinking. In addition, goal-setting opportunities allowed students to consciously set and achieve in-school/out-of-school

successes. Goal-setting helped organize students and focus their effort where it was needed. Student choice was also effective in increasing student engagement. Students had more ownership in the learning when they had input. Tasks were completed more accurately and more in depth when initiated by the students.

In conclusion, cooperative learning , goal-setting, and student choice improved student engagement. We would recommend using these interventions in the future. However, we would recommend that teachers of younger students teach the cooperative learning social skills and roles in isolation before incorporating them into a classroom assignment. Also, more modeling of these skills may be necessary based on the students' previous knowledge. Daily goal-setting worked well when introducing the skill. We would recommend frequent student reflections at the beginning and more teacher input. Student choice on assessment options and research topics requires more teacher effort and organization. Preplanning is crucial. However, there are many opportunities for student input that requires little or no teacher planning. For example, voting on a class read-a-loud book allows for student choice but limited teacher planning. A democratic classroom appears to improve student engagement.

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Appendix A
Sample Student Survey

STUDENT PRETEST

As a part of this class, you will be required to research a topic of your choice. You will write a research paper on your topic and present it orally to the class. Describe the plan you will follow to complete this assignment.

Appendix B
Sample Scoring Rubric

NAME _____ DATE _____ PER. _____

STUDENT SURVEY RUBRIC

Criteria	Always (5)	Partially (4)	Rarely (3)
Logically describes plan			
Identifies multiple steps to be followed			
Lists multiple sources			
Identifies different types of sources (books, magazines, etc.)			
Writes in complete sentences			
Writes legibly			

COMMENTS:

Appendix C
Sample Student Survey

NAME _____ DATE _____ PER. ____

CHARACTERISTICS OF AN ENGAGED LEARNER

Indicator	Frequently	Sometimes	Never
I keep on trying; I do not give up easily.			
I check completed work for accuracy.			
I listen to others with understanding.			
I begin and complete tasks on time.			
I put into words how I solve a problem; I am aware of my own thinking.			
I bring supplies to class (books, pen, pencil, paper, assignments).			
I ask questions and participate in discussions.			
I use knowledge already learned in new situations.			
I accept more than one idea to solve a problem.			

COMMENTS:

Appendix D
Sample Teacher Survey

NAME _____ DATE _____ PER. ____

CHARACTERISTICS OF AN ENGAGED LEARNER

Indicator	Frequently	Sometimes	Never
Keeps on trying; does not give up easily.			
Checks completed work for accuracy.			
Listens to others with understanding.			
Begins and completes tasks on time.			
Puts into words how he or she solved a problem; is aware of his or her own thinking.			
Brings supplies to class (books, pen, pencil, paper, assignments).			
Asks questions and participates in discussions.			
Uses knowledge already learned in new situations.			
Acceptsmore than one idea to solve a problem.			

COMMENTS:

GOAL: In my next speech I will get a 100%.

ACTION PLAN: To get a 100% on my speech I will relax more by reciting my speech at home over and over, so I'll be ready. I will write a speech and practice that I know exactly what to say.

REFLECTION: Currently I have done two speeches I have followed my action plan. Every day before the speech I recite the speech at home. I have also found out that before the speech it is easier to be in a good mood right before you say your speech. Have your friend tell you a joke, or read a funny story because you feel good about yourself and you are able to say your speech smoothly.

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Health

Appendix F
Sample: Goal Sheet

Name _____ Date _____

GOAL SETTING

Goals will be health related. EXAMPLE: Nutrition, Physical Fitness, Self-Esteem, and Personal Hygiene.

GOALS I WILL ACCOMPLISH BY.....

Daily
1)

2)

Tomorrow
1)

2)

Weekend
1)

2)

Winter Break
1)

2)

The end of the semester
1)

2)

The end of the school year
1)

2)

The time I graduate from high school
1)

2)

Mrs. Lewan
Health

Appendix G
Sample: Student Goal Sheet

Name _____ Date _____

GOAL SETTING

Goals will be health related. EXAMPLE: Nutrition, Physical Fitness, Self-Esteem, and Personal Hygiene.

GOALS I WILL ACCOMPLISH BY.....

Daily
1) Brush my teeth
2) Eat breakfast

Tomorrow
1) Pass my test
2) take a shower

Weekend
1) win my water polo game
2) work out

Winter Break
1) eat all healthy food
2) Keep up exercising

The end of the semester
1) pass all classes with good grades
2) get on honor roll

The end of the school year
1) lose the fat on my stomach
2) be physically fit

The time I graduate from high school
1) to keep good healthy eating habits
2) to keep myself looking great

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Appendix H
Sample Social Skills/Roles

COOPERATIVE LEARNING

Social Skills

* Use 12" voices
* It's OK to think
* Don't interrupt others
* Help your neighbor
* Know and do your job
* Listen to all ideas
* Use encouraging words

Roles

MANAGER - The manager gathers the materials that are needed for the activity. This is the only person allowed out of his/her seat. The manager also watches the clock to make sure the task will be completed on time.

RECORDER - The recorder writes the official answers for the group. This sheet will be turned in to the teacher. Each member must sign their name to the official paper.

WORRIER - The worrier checks to make sure every member of the group understands the directions before the group begins working. During the activity, the worrier checks that each member of the group is participating equally and that all members stay on task.

CHECKER - At the end of the activity, the checker makes sure that all the members of the group can do the task, explain each answer, and tell why the answer was chosen.

ENCOURAGER - The encourager watches that all the social skills are being obeyed. He/she also encourages the group by giving compliments or making positive statements.

DISCUSSION DIRECTOR - The discussion director leads the discussion in the group. He/she also reports the group's findings to the class if necessary.

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Appendix I
Sample Social Skills/Roles

GROUP SOCIAL SKILLS

1. Use 6"
2. It is O.K. to think for a while
3. Don't interrupt others when they are talking
4. Do your specific task/job
5. Listen to all ideas
6. Use encouraging words

INDIVIDUAL RESPONSIBILITIES: tasks, roles, assignments

THE CHECKER: This role is very important (critical). This person checks to see that ALL members of the group are assigned a responsibility. After the work is completed, this person checks to see if all necessary information is ready to hand in.

THE WORRIER: Checks to see if all group members understand the instructions. Sees that all members have opportunity to contribute to the group. This person also keeps members on TASK.

THE RECORDER: This member of the group records the official group answers. The answers handed in represent all members and become the group's final product(assignment). When all necessary information is collected, EACH member signs the worksheet (document).

MATERIALS ORGANIZER: This person gathers necessary supplies from table and returns back to group.

DISCUSSION LEADER: Prepares and leads discussions within the group, can record answers if necessary. Gives directions to the group members. Usually assigns roles to members.

THE ENCOURAGER: This person has the responsibility to encourage all members by trying to keep all members participating and feeling good about their work. No put downs for group members. An example,"I like your idea," a smile...GOOD.

Mrs. Lewan
Health

Appendix J

Sample: Social Skills/Roles

Classroom Social Skills

Use 6" Voices

Listen To All Ideas

Help Each Other Stay On Task

Take Turns Talking

Know and Do Your Job

Use Encouraging Words

Appendix K
Sample Assessment Option

THE EGYPT GAME

ESSAY. Answer three of the following essays in complete sentences. Remember to support your answers with examples from the novel. (1.a. or 1.b., 2.a. or 2.b. and 3.a. or 3.b.)

1.a. Name the six members of the Egypt game.

OR

1.b. List five adult characters from the novel.

2.a. Explain why you think April and Melanie became best friends.

OR

2.b. Compare April's behavior at the beginning of the novel to her behavior at the end.

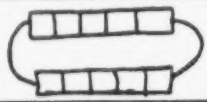
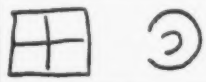
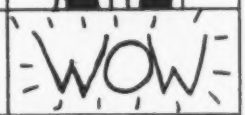
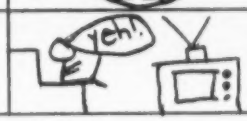
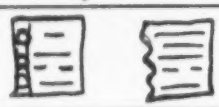
3.a. Imagine you were a member of the Egypt game. What would you add to the game? Why?

OR

3.b. If you could change a part of the story, what part would you change? Why?

Appendix L
Sample Student Created Rubric

BIOGRAPHY BOOK REPORT

GRADING SCALE	1PT. (F)	3PTS. (C)	5PTS.(A)
VOICE			
ORGANIZED			
EYE CONTACT			
INTERESTING			
ORIGINALITY			

1. 10 ARTIFACTS ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

2. WEARS COSTUME: _____ EXTRA CREDIT

3. QUOTATION FROM PERSON:

4. CHARACTER TRAIT and EXAMPLE:

5. CONSIDERED A HERO? YES___, NO___

6. OTHER INTERESTING INFORMATION?

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Health

Appendix M

Sample: Assessment Option

Name _____ Period _____

Option #1
Perform CPR Hands-On Test With Actar Doll
Know Hand Position
Breathing Cycle, Pulse Location and Number of Cycles

Option #2
Complete The Following. Fill in the Blank CPR Test

C.P.R.

Using the word bank that follows, complete the statements in the summary.

C.P.R.	E.M.S.	two	feel
vitals	fifteen	911	listed
conscious	minute	look	survey
four	pulse		

You are in your back yard playing ball with your child when you hear your neighbor screaming for help to call _____. You tell your child to make the call to _____. As you _____ the scene you notice that your neighbor's child is at the bottom of the pool. Your neighbor and you pull the child out of the water, you notice that the child is not _____. You check the child's _____ or ABC's by _____, _____, and _____ for breathing. You knew then that _____ was needed to save this child. After giving _____ breaths of air and _____ cycles of _____ compression's, you continue and check the child's _____ every _____ until help arrives.

Mrs. Lewan
Health

Appendix N

Sample: Topic Choice

Choose from the list below an STD you would like to report on:

Chlamydia	Gonorrhea	Syphilis	HIV	Genital Herpes
Public Lice	Hepatitis	PID	AIDS	

STD Report Format

1. Paper must be typed and double spaced.
2. Font size must be 12-14, no more, no less.
3. Must be a five (5) paragraph paper.
4. Must have at least three (3) references.
5. PLEASE use proper grammar and spelling.
6. List references at the end of your paper and page number.

Ideas For Your Paper

1. Where, when or how disease began?
2. Who is affected by it?
3. Where it is most prevalent?
4. What is the treatment if any?
5. How can it be avoided?
6. Research done, statistics.

Grades

1. One page is worth a C, D, or E.
2. Two pages is worth an A or B. Remember it dot not guarantee this grade.